APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/997,638	11/28/2001	Joseph Peck	5150-53800	7474

7590 03/16/2004		**EXAMINER**
Jeffrey C. Hood		PATEL, RAMESH B
Conley, Rose, & Tayon, P.C.		
P.O. Box 398	**ART UNIT**	**PAPER NUMBER**
Austin, TX 78767	2121	

DATE MAILED: 03/16/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM
THE MAILING DATE OF THIS COMMUNICATION.
- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed
  after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
  Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any
  earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *24 February 2004*.

2a)☒ This action is **FINAL**.   2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is

closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-28* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1, 3-10, 12-20 and 22-28* is/are rejected.

7)☒ Claim(s) *2,11 and 21* is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage

application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1)☐ Notice of References Cited (PTO-892)
2)☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3)☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
      Paper No(s)/Mail Date _____.

4)☐ Interview Summary (PTO-413)
      Paper No(s)/Mail Date. _____ .
5)☐ Notice of Informal Patent Application (PTO-152)
6)☐ Other: _____.

DETAILED ACTION

1.   Claims 1-28 are presented for examination.

Claim rejection – 35 USC 112

2.   The rejection to claims 1-28 under 35 USC 112, second paragraph is withdrawn

due to the amendment.

Claim Rejections - 35 U.S.C. § 102

3.   The rejection to claims 1-28 under 35 U.S.C. 102(b) is maintained and updated

to include the remark(s) and/or newly added limitation(s).

4.   The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that

form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (b) the invention was patented or described in a printed publication in this or a foreign country or in public
>
> use or on sale in this country, more than one year prior to the date of application for patent in the United
>
> States.

Claims 1, 3-10, 12-20 and 22-28 are rejected under 35 U.S.C. 102(b) based

upon a public use or sale of the invention. Claims 1, 3-10, 12-20 and 22-28 are rejected

under 35 U.S.C. 102(b) as being anticipated by Browning et al. (US Patent 6,590,366).

As to claims 1, 10 and 20, Browning teaches the invention including a system, a

method and a carrier medium which comprising program instructions for controlling

motion of an object, the system, the method and the carrier medium, comprising: a

motion device which is operable to move the object, a motion control system which is

coupled to the motion device is taught as the control system having control unit which

provides control signals to maintain a movable member such as rotor or shaft in the

desired position (se, abstract lines 2-5); wherein the motion control system includes a

processor and a memory medium, wherein the memory medium stores a motion control

software program, wherein the motion control software program is executable by the

processor to is taught as real time processing adjust for changes in the dynamics

require real time system identification and processing of the compensation algorithm to

control aspect of the control system (see, col. 4, lines 37-54): determine a placement of

pulses for each of a plurality of time intervals such that the pulses are placed evenly

across the plurality of time intervals, wherein the quantity of pulses in each of the time

intervals is variable as shown in figures 9-12, 12-17and 22-23, the pulses and/or

frequency and/or phase and/or data and/or parameters are determined and placed on

the plurality of time intervals evenly and the quantity of pulses and/or frequency and/or

phase and/or data and/or parameters in each time intervals is variable (see, figures 12-

17); and generate the pulses across the time intervals according to the determined

placement to drive the motion device to move the object is taught as the control system

having control unit which provides control signals to maintain a movable member such

as rotor or shaft in the desired position (see, abstract and figures 12-18 and col. 4, lines

20-54).

As to claims 3, 12 and 22, Browning teaches the system, the method and the

carrier medium, wherein in determining the placement of pulses for each of the plurality

of time intervals, the motion control software program is executable by the processor to:

use a delay to place each pulse at an arbitrary location within one of the time intervals

(see, col. 2, lines 30-44).

As to claims 4-5, 13-14 and 23-24, Browning teaches the system, the method

and the carrier medium, wherein the time intervals are variable in length and wherein

the time intervals are fixed in length (see, figures 12-17).

As to claims 6, 15, 17 and 25, Browning teaches the system, the method and the

carrier medium, wherein in determining the placement of pulses for each of the plurality

of time intervals, the motion control software program is executable by the processor to:

change a pulse rate within one of the time intervals (see, abstract and figures 12-18 and

col. 4, lines 20-54).

As to claims 7, 16 and 26, Browning teaches the system, the method and the carrier medium, wherein the motion device comprises a stepper motor (abstract and figures19-21).

As to claims 8, 19 and 28, Browning teaches the system, the method and the carrier medium, further comprising: a power drive which is coupled to the motion device and the motion control system, wherein the power drive is operable to: receive the pulses from the motion controller; translate the pulses into power signals; and send the power signals to the motion device is taught as real time processing adjust for changes in the dynamics require real time system identification and processing of the compensation algorithm to control aspect of the control system (see, col. 4, lines 37-54).

As to claims 9, 118 and 27, Browning teaches the system, the method and the carrier medium, wherein the motion control system comprises: a computer system; and a motion controller is taught as real time processing of the compensation algorithm to control aspect of the control system having processing software or microcode in combination with processing hardware to implement all aspect of the control system (see, abstract and col. 4, lines 37-54).

Claims 2, 11 and 21 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

The following is a statement of reasons for the indication of allowable subject

matter: the prior art of the record fails to teach or fairly suggest in combination with

other limitations regarding claims 2, 11 and 21, the first rate having a value of 1 plus an

integer portion of a desired fractional rate of pulse generation per time interval; and

determine a placement of pulses for a second time interval following the first time

interval at a second rate having a value of the integer portion of the desired fractional

rate of pulse generation.

5.   Applicant's arguments filed 2/24/2004 have been fully considered but they are

not persuasive. As to the applicant's arguments regarding claims 1, 3-10, 12-20 and 22-

28, the Browning reference teaches the invention including a system, a method and a

carrier medium which comprising program instructions for controlling motion of an

object, the system, the method and the carrier medium, comprising: a motion device

which is operable to move the object, a motion control system which is coupled to the

motion device is taught as the control system having control unit which provides control

signals to maintain a movable member such as rotor or shaft in the desired position as

shown in abstract, lines 2-5; wherein the motion control system includes a processor

and a memory medium, wherein the memory medium stores a motion control software

program, wherein the motion control software program is executable by the processor to

is taught as real time processing adjust for changes in the dynamics require real time

system identification and processing of the compensation algorithm to control aspect of

the control system (see, col. 4, lines 37-54): determine a placement of pulses for each

of a plurality of time intervals wherein the pulses are placed evenly across the plurality

of time intervals, wherein the quantity of pulses in each of the time intervals is variable

as shown in figures 9-12, 12-17and 22-23, the pulses and/or frequency and/or phase

and/or data and/or parameters are determined and placed on the plurality of time

intervals evenly and the quantity of pulses and/or frequency and/or phase and/or data

and/or parameters in each time intervals is variable. The Browning reference teaches

the claim language as claimed to the extent required.

6.   The prior art made of record and not relied upon is considered pertinent to

applicant's disclosure.

        THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time

policy as set forth in 37 CFR 1.136(a).

        A shortened statutory period for reply to this final action is set to expire THREE

MONTHS from the mailing date of this action. In the event a first reply is filed within

TWO MONTHS of the mailing date of this final action and the advisory action is not

mailed until after the end of the THREE-MONTH shortened statutory period, then the

shortened statutory period will expire on the date the advisory action is mailed, and any

extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of

the advisory action. In no event, however, will the statutory period for reply expire later

than SIX MONTHS from the mailing date of this final action.

7.   Any inquiry concerning this communication or earlier communications from the

examiner should be directed to Ramesh B. Patel whose telephone number is 703-308-

6673. The examiner can normally be reached on M-Th; 7:00 AM to 5:30 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's

supervisor, Anil Khatri can be reached on 703-305-0282. The fax phone numbers for

the organization where this application or proceeding is assigned are 703-308-9051 for

regular communications and 703-305-3718 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or

proceeding should be directed to the receptionist whose telephone number is 703-305-

3900.

Ramesh B. Patel
Primary Examiner
Art Unit 2121

March 15, 2004